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10/804,921	03/19/2004	Ross Thomas Kaufman	20357A (27839-118)	8211
45736 7590 01/27/2009 Christopher M. Goff (27839) ARMSTRONG TEASDALE LLP ONE METROPOLITAN SQUARE SUITE 2600 ST. LOUIS, MO 63102				
EXAMINER				
HAND, MELANIE JO				
ART UNIT		PAPER NUMBER		
3761				
NOTIFICATION DATE		DELIVERY MODE		
01/27/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USpatents@armstrongteasdale.com



### Office Action Summary

**Application No.**

10/804,921

**Applicant(s)**

KAUFMAN ET AL.

**Examiner**

MELANIE J. HAND

**Art Unit**

3761

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 October 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 17-57 is/are pending in the application.
- 4a) Of the above claim(s) 30-32 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15, 17-29 and 33-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S508)  
Paper No(s)/Mail Date 8/11/08
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_



## **DETAILED ACTION**

### ***Election/Restrictions***

1. Applicant's election with traverse of species (1) comprising a laminate of a copolyester and a nonwoven bonded carded web and the subspecies terephthalic acid, adipic acid, trimellitic acid and 1,4 butanediol, claims 1-15, 17-29 and 33-57 in the reply filed on October 16, 2006 is acknowledged. The traversal is on the ground(s) that more than one independent or distinct invention may be claimed in one national application if there is an allowable generic claim. This is not persuasive because this rule refers to rejoinder of distinct or independent inventions after a generic claim has been found to be directed to allowable subject matter, at which time the previously withdrawn claims are then examined on the merits and they may be drawn to one or more inventions. As no allowable generic claim exist at this time, this rule does not apply.
2. Claims 30-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim.

The requirement is still deemed proper and is therefore made FINAL.

### ***Response to Amendment***

3. Examiner has maintained all claim rejections made in the final action under 35 U.S.C. 103 as examiner still believes the art relied upon to be the closest prior art. Thus, since all arguments made by applicant have been fully addressed regarding these rejections, they will not be addressed further herein even though the rejections have been maintained.



***Claim Rejections - 35 USC § 103***

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1-15, 17-29 and 33-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wu et al (WO 02/23465 A1) in view of Hale et al (U.S. Patent Application Publication No. 2003/0039851).

With respect to **claim 1**: Wu teaches a laminate film for use as a laminated outer cover in an absorbent article. Wu teaches by reference to WO 98/23673, to Brink, that the laminated film comprising a biodegradable stretched aliphatic-aromatic copolyester film, the film comprising filler particles and a copolyester comprising from about 2.5-30 mol % (converted from mol% based upon 200% total) of aromatic dicarboxylic acid or ester thereof, which overlaps the range of 10 mole% to about 30 mole%; from about 15-42.5 mol% (converted from mol% based upon 200% total) of aliphatic dicarboxylic acid or ester thereof, which overlaps the range of 20 mole% to about 40 mole%, and 50% dihydric alcohol, which falls within the range of from about 30 mole% to about 60 mole% ('673, Page 11, lines 19-25, Page 16, lines 10-12).

Wu does not explicitly teach a weight average molecular weight, a number average molecular weight or a glass transition temperature of the instant copolyester. However, Wu teaches by reference to Brink a laminated copolyester film having a composition substantially identical to that claimed. It would be obvious to one of ordinary skill in the art to modify the article of Wu so as to have a weight average molecular weight, number average molecular weight and glass transition temperature that each fall within the respective claim range with a reasonable expectation of success to provide an article having desired breathability and biodegradability characteristics. When the structure or composition recited in the reference is



substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant.

Wu does not explicitly teach an absorbent article having a laminated outer cover, however since Wu teaches that the laminate of the instant invention can be used as a laminated outer cover in an absorbent article (Page 7, lines 1-5), it would be obvious to one of ordinary skill in the art to include this laminate in an absorbent article as a laminated outer cover with a reasonable expectation of success.

Wu, either alone or by reference to Brink, does not explicitly teach that the film additionally comprises a polyfunctional branching agent. Hale teaches a laminate film with a composition that is substantially identical to that taught by Wu by reference to Brink, and teaches that said film is formed using a polyfunctional branching agent inasmuch as its functionality is three to six. ('851, ¶0054) Since both films have a substantially identical composition and seek to solve a similar problem in the art (providing a film with greater breathability), it would be obvious to one of ordinary skill in the art to modify the film taught by Wu so as to include a polyfunctional branching agent as taught by Hale to impart increased breathability to the article.

With respect to **claim 2**: The filler particles taught by Wu are present in the film in an amount of between 25-60% by weight of the polymer mixture (copolyester + filler particles), which overlaps



the range of from about 30% (by weight of film and filler particles) to about 80% (by weight of film and filler particles). (Page 7, lines 19-22, Page 8, lines 9-13)

With respect to **claim 3**: The filler particles taught by Wu are present in the film in an amount of between 25-60% by weight of the polymer mixture (copolyester + filler particles), which includes the range of from about 50% (by weight of film and filler particles) to about 55% (by weight of film and filler particles). (Page 7, lines 19-22, Page 8, lines 9-13)

With respect to **claims 4,5**: The filler particles are calcium carbonate. (Page 8, line 13)

With respect to **claim 6**: The filler particles are calcium carbonate, which is by its nature nonporous. (Page 8, line 13)

With respect to **claim 7**: The copolyester taught by Wu by reference to Brink comprises from about 2.5-30 mol % (converted from mol% based upon 200% total) which overlaps the range of 15 mole% to about 25 mole% of aromatic dicarboxylic acid or ester thereof, from about 25 mole% to about 35 percent of aliphatic dicarboxylic acid or ester thereof, and from about 45 mole% to about 55 mole% dihydric alcohol and wherein the weight average molecular weight of the copolyester is from about 100,000 to about 130,000 Daltons, and wherein the number average molecular weight of the copolyester is from about 40,000 to about 60,000 Daltons.  
(¶0026)

With respect to **claim 8**: The copolyester taught by Ning is identical to a copolyester taught by applicant in the claimed invention and thus comprises from about 17.5 mole% to about 22.5



mole% of aromatic dicarboxylic acid or ester thereof, from about 15–42.5 mol% (converted from mol% based upon 200% total), which overlaps the range of 27.5 mole% to about 32.5 mole% percent of aliphatic dicarboxylic acid or ester thereof, and 50% dihydric alcohol, which falls within the range of from about 47.5 mole% to about 52.5 mole% dihydric alcohol. ('673, Page 11, lines 19–25, Page 16, lines 10–12) The weight average molecular weight of the copolyester taught by Wu by reference to Brink is inherently from about 105,000 to about 120,000 Daltons, and the number average molecular weight of said copolyester taught by Wu is inherently from about 42,000 to about 50,000 Daltons. The support for this inherency argument has been stated *supra* with respect to claim 1.

With respect to **claim 9**: The aromatic dicarboxylic acid or ester thereof taught by Wu is an unsubstituted aromatic dicarboxylic acid. (Page 9, lines 8,9)

With respect to **claim 10**: The aromatic dicarboxylic acid or ester thereof is terephthalic acid. (Page 9, lines 8,9)

With respect to **claims 11,12**: The aliphatic dicarboxylic acid or ester thereof is taught by Wu by reference to Brink to be succinic acid ('673, Page 16, lines 10–12).

With respect to **claim 13**: The dihydric alcohol is a straight chain diol. (Page 9, lines 11,12)

With respect to **claims 14,15**: The dihydric alcohol is 1,4-butanediol. (Page 9, lines 11,12)



With respect to **claim 17**: The polyfunctional branching agent of the combined teaching of Wu and Hale is a material with three or more carboxylic acid functions. ('851, ¶0057) The motivation to combine the devices of Wu and Hale is stated *supra* with respect to claim 16.

With respect to **claim 18**: The polyfunctional branching agent of the combined teaching of Wu and Hale is trimellitic acid. ('851, ¶0057) The motivation to combine the devices of Wu and Hale is stated *supra* with respect to claim 16.

With respect to **claim 19**: The aromatic dicarboxylic acid is terephthalic acid, the aliphatic dicarboxylic acid is adipic acid, and the dihydric alcohol is 1,4 butanediol (Page 9, lines 6-12)

With respect to **claim 20**: The filler material is calcium carbonate. (Page 8, lines 12,13)

With respect to **claim 21**: The film has a thickness of between 0.25-10 mils, or 6.35-254 micrometers, which overlaps the range of less than about 250 micrometers. (Page 11, lines 19,20)

With respect to **claim 22**: The film has a thickness of between 0.25-10 mils, or 6.35-254 micrometers, which overlaps the range of from about 2.5 micrometers to about 130 micrometers (Page 11, lines 19,20)

With respect to **claim 23**: The laminated film for use as an outercover further comprises a nonwoven material. (Page 7, lines 21,22)



With respect to **claim 24**: Wu does not teach that the nonwoven is a spunbond nonwoven, however spunbond refers only to the process in which the nonwoven is formed rather than its composition or properties. The limitation of claim 24 is therefore a product-by-process limitation that is not patentable over the prior art of Wu. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also *MPEP* § 2113. The burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir. 1983)

With respect to **claim 25**: The nonwoven material has a basis weight of 5-75 gsy, which falls within the range of 3-400 gsm. (Page 11, line 23 – Page 12, line 2)

With respect to **claim 26**: The film and the nonwoven material are laminated together, but Wu does not teach a specific lamination mode. Adhesive is a lamination means that is well-known in the art, and seeks to solve a similar problem (i.e. create a laminate) therefore it would be obvious to one of ordinary skill in the art to laminate the biodegradable copolymer film taught by Wu to the nonwoven using adhesive with a reasonable expectation of success. (Page 7, lines 21,22)

With respect to **claim 27**: Thermal bonding is a lamination means that is well-known in the art, and seeks to solve a similar problem (i.e. create a laminate) therefore it would be obvious to one



of ordinary skill in the art to laminate the biodegradable copolymer film taught by Wu to said nonwoven using thermal bonding with a reasonable expectation of success. (Page 7, lines 21,22)

With respect to **claim 28**: Ultrasonic bonding is a lamination means that is well-known in the art, and seeks to solve a similar problem (i.e. create a laminate) therefore it would be obvious to one of ordinary skill in the art to laminate the biodegradable copolymer film taught by Wu to said nonwoven using ultrasonic bonding with a reasonable expectation of success. (Page 7, lines 21,22)

With respect to **claim 29**: Wu teaches that the laminate comprises a nonwoven material, but does not explicitly teach that the laminated material further comprises a bonded carded web. However, spunbond refers only to the process in which the nonwoven is formed rather than its composition or properties. The limitation of claim 29 is therefore a product-by-process limitation that is not patentable over the prior art of Wu. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." *In re Thorpe*, 777 F.2d 695, 227 USPQ 964 (Fed. Cir. 1985). See also *MPEP* § 2113. The burden shifts to applicant to come forward with evidence establishing an unobvious difference between the claimed product and the prior art product. *In re Marosi*, 710 F.2d 798, 802, 218 USPQ 289, 292 (Fed. Cir.1983)

With respect to **claim 33**: The film taught by Wu is of a substantially identical composition to that of the claimed invention, thus the film taught by Wu has substantially identical mechanical



properties such as bulk modulus, which is a quantifier of hydrostatic pressure resistance, and thus further inherently has a hydrostatic pressure resistance of at least about 60 millibar. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 34**: The film taught by Wu is of a substantially identical composition to that of the claimed invention, thus the film taught by Wu has substantially identical mechanical properties such as bulk modulus, which is a quantifier of hydrostatic pressure resistance, and thus further inherently has a hydrostatic pressure resistance of at least about 80 millibar. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 35**: The film taught by Wu is of a substantially identical composition to that of the claimed invention, thus the film taught by Wu has substantially identical mechanical properties such as bulk modulus, which is a quantifier of hydrostatic pressure resistance, and thus further inherently has a hydrostatic pressure resistance of at least about 120 millibar. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 36**: The film taught by Wu is of a substantially identical composition to that of the claimed invention, thus the film taught by Wu has substantially identical mechanical properties such as bulk modulus, which is a quantifier of hydrostatic pressure resistance, and thus further inherently has a hydrostatic pressure resistance of at least about 180 millibar. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 37**: The film has a water vapor transmission rate of greater than 1,000 g/m<sup>2</sup>/day, which overlaps the range of at least about 2,000 g/m<sup>2</sup>/day. (Page 7, lines 13,14)



With respect to **claim 38**: The film has a water vapor transmission rate of greater than 1,000 g/m<sup>2</sup>/day, which overlaps the range of at least about 5,000 g/m<sup>2</sup>/day. (Page 7, lines 13,14)

With respect to **claim 39**: The film has a water vapor transmission rate of greater than 1,000 g/m<sup>2</sup>/day, which overlaps the range of at least about 10,000 g/m<sup>2</sup>/day. (Page 7, lines 13,14)

With respect to **claim 40**: The film has a water vapor transmission rate of about 3,500 g/m<sup>2</sup>/day, which overlaps the range of at least about 25,000 g/m<sup>2</sup>/day. (Page 7, lines 13,14)

With respect to **claim 41**: The film inherently has a modulus of elasticity of from about 50 MPa to about 250 MPa. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 42**: The film has a modulus of elasticity of from about 70 MPa to about 150 MPa. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 43**: The film has a modulus of elasticity of from about 80 MPa to about 100 MPa. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 44**: The film can inherently be stretched in the machine direction and not break until from about 15% strain to about 100% strain is reached. The support for this inherency argument is stated *supra* with respect to claim 1.



With respect to **claim 45**: The film can inherently be stretched in the machine direction and not break until from about 20% strain to about 60% strain is reached. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 46**: The film can inherently be stretched in the machine direction and not break until from about 30% strain to about 50% strain is reached. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 47**: The film can inherently be stretched in the cross direction and not break until from about 150% strain to about 500% strain is reached. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 48**: The film can inherently be stretched in the cross direction and not break until from about 175% strain to about 400% strain is reached. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 49**: The film can be inherently stretched in the cross direction and not break until from about 200% strain to about 300% strain is reached. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 50**: The film inherently has a break stress of from about 10 MPa to about 50 MPa. The support for this inherency argument is stated *supra* with respect to claim 1.



With respect to **claim 51**: The film inherently has a break stress of from about 15 MPa to about 40 MPa. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 52**: The film has a break stress of from about 25 MPa to about 35 MPa. The support for this inherency argument is stated *supra* with respect to claim 1.

With respect to **claim 53**: Wu teaches that the articles with which the film can be used includes diapers.

With respect to **claim 54**: Wu teaches a laminate for use in an absorbent article as a laminated outer cover, the laminated outer cover comprising a biodegradable stretched aliphatic-aromatic copolyester film, the film comprising filler particles and a copolyester by reference to Brink, the film comprising filler particles and a copolyester comprising from about 2.5-30 mol % (converted from mol% based upon 200% total) of terephthalic acid, which overlaps the range of 10 mole% to about 30 mole%; from about 15-42.5 mol% (converted from mol% based upon 200% total) of adipic acid, which overlaps the range of 20 mole% to about 40 mole%, and 50% 1,4-butanediol, which falls within the range of from about 30 mole% to about 60 mole% ('673, Page 11, lines 19-25, Page 16, lines 10-12). Wu does not explicitly teach a weight average molecular weight, a number average molecular weight or a glass transition temperature of the instant copolyester. However, Wu teaches by reference to Brink a laminated copolyester film having a composition substantially identical to that claimed. It would be obvious to one of ordinary skill in the art to modify the article of Wu so as to have a weight average molecular weight, number average molecular weight and glass transition temperature that each fall within the respective claim



range with a reasonable expectation of success to provide an article having desired breathability and biodegradability characteristics. When the structure or composition recited in the reference is substantially identical to that of the claimed invention, claimed properties or functions are presumed to be inherent. See MPEP §2112-2112.01. A prima facie case of obviousness has been established when the reference discloses all of the limitations of a claim except for a property or function and the examiner cannot determine whether or not the reference inherently possesses properties that render obvious the claimed invention but has a basis for shifting the burden of proof to the applicant.

Wu does not explicitly teach an absorbent article having a laminated outer cover, however since Wu teaches that the laminate of the instant invention can be used as a laminated outer cover in an absorbent article (Page 7, lines 1-5), it would be obvious to one of ordinary skill in the art to include this laminate in an absorbent article as a laminated outer cover with a reasonable expectation of success.

Wu, either alone or by reference to Brink, does not explicitly teach that the film additionally comprises a polyfunctional branching agent. Hale teaches a laminate film with a composition that is substantially identical to that taught by Wu by reference to Brink, and teaches that said film is formed using a polyfunctional branching agent inasmuch as its functionality is three to six. ('851, ¶0054) Since both films have a substantially identical composition and seek to solve a similar problem in the art (providing a film with greater breathability), it would be obvious to one of ordinary skill in the art to modify the film taught by Wu so as to include a polyfunctional branching agent as taught by Hale to impart increased breathability to the article.



With respect to **claim 55**: The filler particles taught by Wu are present in the film in an amount of between 25-60% by weight of the polymer mixture (copolyester + filler particles), which overlaps the range of from about 30% (by weight of film and filler particles) to about 70% (by weight of film and filler particles). (Page 7, lines 19-22, Page 8, lines 9-13)

With respect to **claims 56,57**: The filler particles are calcium carbonate. (Page 8, line 13)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



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/Melanie J Hand/

Examiner, Art Unit 3761